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<b>8 TROFT TO-1595</b> (Rev. 10/02)	REC			U.S. DEPARTMENT OF COMMER U.S. Patent and Trademark Of
OMB No. 0651-0027 (exp. 6/30/2005)	_		181883	
Tab settings ⇔ ⇔ ⇔ To the Honorable Commissio	ner of Pate			original documents or copy thereof.
1. Name of conveying party(ies Photogen Technologies, Inc.	s): (	6.20.03		s of receiving party(ies) Science Partners IV L.P.
			Internal Address:	
Additional name(s) of conveying party	ies) attach			
3. Nature of conveyance:			-	
Assignment	Пм	erger		
		-	Street Address: 2	22 Berkley Street, Suite 1650
Security Agreement		hange of Name		
Other				
				State:_ <sup>MA</sup> _Zip:_02116
05/01/2003 Execution Date:			Additional name(s) & a	ddress(es) attached?
4. Application number(s) or pa	tent numt	per(s):		
			lication, the execution da	ate of the application is:
A. Patent Application No.(s)	-		B. Patent No.(s)	
10/290.582; 10/40			5,114,703; 5	5,496,536
		 Additional numbers a		
5. Name and address of party			6. Total number of ap	plications and patents involved:
concerning document should				3.41)\$_160.00
Name:Edouard C. LeFe	/re, ⊑sq.			ο.4 ()φ
Internal Address:			Enclosed	
			Authorized to	be charged to deposit account
			· · · · · · · · · · · · · · · · · · ·	
			8. Deposit account nu	umber:
Street Address: Epstein Bee	cker & Gr	een, P.C.		
111 Huntington Avenue				
City: BostonState: <sup>N</sup>	Zip:			
		DO NOT US	E THIS SPACE	
9. Signature.			_	
	~	<		
Edward Clefe	vne	_ ~	the V	6/19/03
Name of Person Sig	ning		Signature	Date
Tota			ver sheet, attachments, and de th required cover sheet informat	
	Mail docume			
	Cor	nmissioner of Patents 8	Trademarks, Box Assignments on, D.C. 20231	

## RECORDATION FORM COVER SHEET CONTINUATION PAGE

## Item 2 Name of receiving party(ies):

MRNA Fund II L.P. 222 Berkley Street, Suite 1650 Boston, MA 02116

Delaware Limited Partnership

Mi3 L.P. One Hollis Street, Suite 232 Wellesley, MA 02482

Delaware Limited Partnership

#### INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECUAL PROPERTY SECURITY AGREEMENT ("Agreement"), dated as of May 1, 2003, is made by and among Photogen Technologies, Inc., a Nevada corporation (the "Debtor"), Oxford BioScience Partners IV L.P., and MRNA Fund II L.P. (each a "Secured Party" and collectively the "Secured Parties").

#### <u>Recitals</u>

The Debtor has issued certain Revolving Convertible Senior Secured Promissory Notes dated of even date in favor of each of the Secured Parties in the aggregate original principal amount of up to \$1,500,000 (collectively, the "Convertible Notes").

As a condition to extending credit to the Debtor under the Convertible Notes, the Secured Parties have required the execution and delivery of this Agreement by the Debtor.

ACCORDINGLY, in consideration of the mutual covenants contained herein, the parties hereby agree as follows:

1. <u>Definitions</u>. All terms defined in the Recitals hereto that are not otherwise defined herein shall have the meanings given to them therein. In addition, the following terms have the meanings set forth below:

"Obligations" means each and every debt, liability and obligation of every type and description which the Debtor may now or at any time hereafter owe to the Secured Parties under the Convertible Notes, whether such debt, liability or obligation now exists or is hereafter created or incurred and whether it is or may be direct or indirect, due or to become due, or absolute or contingent.

"Patents" means all of the Debtor's right, title and interest in and to patents or applications for patents, including any provisional and non-provisional patent applications, issued patents, reissued patents, re-examinations, divisionals, continuations, continuation-in-parts thereof and any co-pending foreign patents or patent applications, fees or royalties with respect to each, and including, without limitation, the right to sue for past infringement and damages therefor, and licenses thereunder, all as presently existing or hereafter arising or acquired, including, without limitation, any patent application listed on <u>Exhibit A</u>, this list being non-exclusive.

"Trademarks" means all of the Debtor's present and future right, title and interest in and to marks, including, but not limited to, all renewals thereof, all proceeds of infringement suits, the right to sue for past, present and future infringements and all rights corresponding thereto throughout the world, and the entire goodwill of the business associated with and symbolized by the marks, including, without limitation, the marks listed on <u>Exhibit B</u>, this list being non-exclusive.

BO:99922.3

2. <u>Security Interest</u>. The Debtor hereby irrevocably pledges and assigns to, and grants the Secured Parties a security interest, with power of sale to the extent permitted by law (the "Security Interest"), in the Patents and the Trademarks to secure payment of the Obligations; provided, however, that the Security Interest shall not include any right, title or interest in assets hereafter acquired from Alliance Pharmaceutical Corp., a New York corporation (the "Security Interest Carve-Out"). Upon the Secured Parties' request, the Debtor shall execute financing statements or other applicable documents covering the Patents and the Trademarks and take such other steps as are necessary to cooperate with the Secured Parties to perfect its security interest granted herein. Upon the Debtor's request, the Secured Parties shall execute amendments to financing statements or other applicable documents and take such other steps as are necessary to establish the Security Interest Carve-Out.

3. <u>Representations, Warranties and Agreements</u>. The Debtor hereby represents, warrants and agrees as follows:

(a) *Existence; Authority.* The Debtor is a corporation, having full power to and authority to make and deliver this Agreement. The execution, delivery and performance of this Agreement by the Debtor have been duly authorized by all necessary action of the Debtor's board of directors, and if necessary its stockholders, and do not and will not violate the provisions of, or constitute a default under, any presently applicable law or its certificate of incorporation or bylaws or any agreement presently binding on it. This Agreement has been duly executed and delivered by the Debtor and constitutes the Debtor's lawful, binding and legally enforceable obligation. The correct legal name of the Debtor is Photogen Technologies, Inc. The authorization, execution, delivery and performance of this Agreement do not require notification to, registration with, or consent or approval by, any federal, state or local regulatory body or administrative agency.

(b) *Patents*. <u>Exhibit A</u> accurately lists all Patents owned or controlled by the Debtor as of the date hereof and accurately reflects the existence and status of registrations pertaining to such Patents as of the date hereof.

(c) *Trademarks*. <u>Exhibit B</u> accurately lists all Trademarks owned or controlled by the Debtor as of the date hereof and accurately reflects the existence and status of registrations pertaining to such Trademarks as of the date hereof. The Debtor further represents and warrants that:

- (i) The Trademarks are subsisting and have not been adjudged invalid or unenforceable;
- (ii) To the Debtor's knowledge, the Trademarks that are registered are valid and enforceable;
- (iii) Debtor has no notice of any claim that the use of any of the Trademarks does or may violate the rights of any third person;

PATENT REEL: 014192 FRAME: 0218

- (iv) The Debtor has used, and will continue to use for the duration of this Agreement, proper statutory notice in connection with its use of the Trademarks; and
- (v) The Debtor has used, and will continue to use for the duration of this Agreement, consistent standards of quality of goods and services marked by the Trademarks.

(d) *Title.* The Debtor has absolute title to each Patent listed on <u>Exhibit A</u>, and each Trademark listed on <u>Exhibit B</u>, free and clear of all security interests, liens and encumbrances, except the Security Interest granted herein, including, without limitation, pledges, assignments, licenses, registered user agreements and covenants by the Debtor not to sue third persons. The Debtor (i) will have, at the time the Debtor acquires any rights in Patents or Trademarks hereafter arising, absolute title to each such Patent or Trademark, free and clear of all security interests, liens and encumbrances, except the Security Interest granted herein, and (ii) will keep all Patents and Trademarks free and clear of all security interests, liens and Trademarks free and clear of all security interests, liens and marks free and clear of all security interests, liens and encumbrances except the Security Interest granted herein, and (ii) will keep all Patents and Trademarks free and clear of all security interests, liens and encumbrances except the Security Interest granted herein.

(e) *No Sale.* The Debtor will not sell or otherwise dispose of the Patents or the Trademarks, or any interest therein, without the Secured Parties' prior written consent, which shall not be unreasonably withheld.

(f) *Defense.* The Debtor will at its own expense, and using its best efforts, protect and defend the Patents and the Trademarks against all claims or demands of all persons other than the Secured Parties.

(g) *Maintenance*. The Debtor will at its own expense maintain the Patents and the Trademarks to the extent reasonably advisable in its business, including, but not limited to, filing all applications to register and all affidavits and renewals possible with respect to issued registrations. The Debtor covenants that it will not abandon nor fail to pay any maintenance fee or annuity due and payable on any Patent or Trademark, nor fail to file any required affidavit in support thereof, without first providing the Secured Parties with (i) sufficient written notice to allow the Secured Parties to timely pay any such maintenance fees or annuity which may become due on any of said Patents or Trademarks, or to file any affidavit with respect thereto, and (ii) a separate written power of attorney or other authorization to pay such maintenance fees or annuities, or to file such affidavit, should such be necessary or desirable.

(h) The Secured Parties' Right to Take Action. If the Debtor fails to perform or observe any of its covenants or agreements set forth in this Section 3, and if such failure continues for a period of ten (10) calendar days after the Secured Parties give the Debtor written notice thereof (or, in the case of the agreements contained in subsection (g), immediately upon the occurrence of such failure, without notice or lapse of time), or if the Debtor notifies the Secured Parties that it intends to abandon a Patent or Trademark, the Secured Parties may (but need not) perform or observe such covenant or agreement on behalf of and in the name, place and stead of the Debtor (or, at the Secured Parties' option, in the Secured Parties' own names) and may (but need not) take any and all other actions which the Secured Parties may reasonably deem necessary to cure or correct such failure.

(i) Costs and Expenses. Except to the extent that the effect of such payment would be to render any loan or forbearance of money usurious or otherwise illegal under any applicable law, the Debtor shall pay the Secured Parties on demand the amount of all moneys expended and all costs and expenses (including reasonable attorneys' fees) incurred by the Secured Parties in connection with or as a result of the Secured Parties' taking action under subsection (h) or exercising its rights under Secured Parties at the highest rate there applicable to any of the Obligations.

Power of Attorney. To facilitate the Secured Parties' taking action under (i) subsection (h) and exercising its rights under Section 6, the Debtor hereby irrevocably appoints (which appointment is coupled with an interest) the Secured Parties, or their delegate, as the attorney-in-fact of the Debtor with the right (but not the duty) from time to time to create, prepare, complete, execute, deliver, endorse or file, in the name and on behalf of the Debtor, any and all instruments, documents, applications, financing statements, and other agreements and writings required to be obtained, executed, delivered or endorsed by the Debtor under this Section 3, or, necessary for the Secured Parties, after an Event of Default, to enforce or use the Patents or the Trademarks or to grant or issue any exclusive or non-exclusive license under the Patents or the Trademarks to any third party, or to sell, assign, transfer, pledge, encumber or otherwise transfer title in or dispose of the Patents or the Trademarks to any third party. The Debtor hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof. The power of attorney granted herein shall terminate upon the payment and performance of all of the Obligations.

4. <u>The Debtor's Use of the Patents and the Trademarks</u>. The Debtor shall be permitted to control and manage the Patents and the Trademarks, including the right to exclude others from making, using or selling items covered by the Patents and the Trademarks and any licenses thereunder, in the same manner and with the same effect as if this Agreement had not been entered into, so long as no Event of Default occurs and remains uncured.

5. <u>Events of Default</u>. Each of the following occurrences shall constitute an event of default under this Agreement (herein called "Event of Default"): (a) the Debtor shall fail to pay any amount pursuant to the Convertible Notes when due; or (b) the occurrence of an Acceleration Event, as defined in the Convertible Notes; or (c) the Debtor shall fail to observe or perform any covenant or agreement herein binding on it and such failure is not remedied within 30 days after notice thereof to the Debtor by the Secured Parties; or (d) any of the representations or warranties contained in Section 3 shall prove to have been incorrect in any material respect when made.

6. <u>Remedies</u>. Upon the occurrence of an Event of Default and at any time thereafter, the Secured Parties may, at their option, take any or all of the following actions:

(a) The Secured Parties may exercise any or all remedies available under the Convertible Notes;

(b) The Secured Parties may sell, assign, transfer, pledge, encumber or otherwise dispose of the Patents and the Trademarks; and

(c) The Secured Parties may enforce the Patents and the Trademarks and any licenses thereunder, and if the Secured Parties shall commence any suit for such enforcement, the Debtor shall, at the request of the Secured Parties, do any and all reasonable and lawful acts and execute any and all proper documents required by the Secured Parties in aid of such enforcement.

Each Secured Party's right to recover is limited to its respective pro rata share of the Obligations. The Secured Parties shall account to the Debtor for excess proceeds to the extent provided by law.

7. <u>Release of Security Interest</u>. Upon the payment or discharge in full of the Obligations (including by conversion of principal and interest under the Convertible Notes into Common Stock of the Debtor), the Secured Parties will, at request of the Debtor, execute and deliver to the Debtor such documents and instruments as the Debtor shall reasonably request to release the lien on and security interest in the Patents and Trademarks that have been granted hereunder.

8. <u>Notice</u>. All notices and other communications hereunder shall be in writing and shall be (a) personally delivered, (b) sent by first class United States mail, (c) sent by overnight courier of national reputation, or (d) transmitted by telecopy, in each case addressed or telecopied to the party to whom notice is being given at its address or telecopier number as set forth below its signature or on <u>Schedule 1</u>, as the case may be, or, as to each party, at such other address or telecopier number as may hereafter be designated by such party in a written notice to the other party complying as to delivery with the terms of this Section, in each case with a copy to all other parties hereto. All such notices, requests, demands and other communications shall be deemed to have been given on (i) the date received if personally delivered, (ii) when deposited in the mail if delivered by mail, (iii) the date sent if sent by overnight courier, or (iv) the date of transmission if delivered by telecopy.

9. <u>Miscellaneous</u>. This Agreement can be waived, modified, amended, terminated or discharged, and the Security Interest can be released, only explicitly in a writing signed by the Secured Parties. A waiver signed by the Secured Parties shall be effective only in the specific instance and for the specific purpose given. Mere delay or failure to act shall not preclude the exercise or enforcement of any of the Secured Parties' rights or remedies. All rights and remedies of the Secured Parties shall be cumulative and may be exercised singularly or concurrently, at the Secured Parties' options, and the exercise or enforcement of any one such

right or remedy shall neither be a condition to nor bar the exercise or enforcement of any other. If the Debtor receives instructions from both Secured Parties that conflict with each other, the Debtor shall have the right to refrain from taking any action until the Debtor receives consistent instructions from both Secured Parties. The Secured Parties shall not be obligated to preserve any rights that the Debtor may have against prior parties, to realize on the Patents and the Trademarks at all or in any particular manner or order, or to apply any cash proceeds of the Patents and the Trademarks in any particular order of application. This Agreement shall be binding upon and inure to the benefit of the Debtor and the Secured Parties and their respective participants, successors and assigns and shall take effect when signed by the Debtor and delivered to the Secured Parties, and the Debtor waives notice of the Secured Parties' acceptance hereof. The Secured Parties may execute this Agreement if appropriate for the purpose of filing, but the failure of the Secured Parties to execute this Agreement shall not affect or impair the validity or effectiveness of this Agreement. A carbon, photographic or other reproduction of this Agreement or of any financing statement signed by the Debtor shall have the same force and effect as the original for all purposes of a financing statement. This Agreement shall be governed by the internal law of the state of Nevada without regard to conflicts of law provisions. If any provision or application of this Agreement is held unlawful or unenforceable in any respect, such illegality or unenforceability shall not affect other provisions or applications which can be given effect and this Agreement shall be construed as if the unlawful or unenforceable provision or application had never been contained herein or prescribed hereby. All representations and warranties contained in this Agreement shall survive the execution, delivery and performance of this Agreement and the creation and payment of the Obligations.

# THE PARTIES WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING BASED ON OR PERTAINING TO THIS AGREEMENT.

[signature page follows]

6

IN WITNESS WHEREOF, the parties have executed this Intellectual Property Security Agreement as of the date written above.

### THE DEBTOR:

PHOTOGEN TECHNOLOGIES, INC.

By Frele Kavenny Name: BROCKS BOYEROUX Its: CHICEF FILMANCIAL OFFICE

Address:

Photogen Technologies, Inc.
140 Union Square Drive
New Hope, PA 18938
Attn: Taffy Williams, Ph.D.
President and Chief Executive Officer

(Signature page to the Intellectual Property Security Agreement)

THE SECURED PARTIES:

OXFORD BIOS	CIENCE P	ARTNERS	IV L.P.
By: wellow	1 Jan	uu	
Name: Jonathan	Haming		
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Address:	$\searrow$		

Oxford BioScience Partners IV L.P. 222 Berkley Street, Suite 1650 Boston, MA 02116

MRN **FUND II** P, its General Partner 00 MA ゆ B ulf Name: Nonaj have Flowing General Its: proma Address:

MRNA Fund II L.P. 222 Berkley Street, Suite 1650 Boston, MA 02116

(Signature page to the Intellectual Property Security Agreement)

## EXHIBIT A

## UNITED STATES PATENTS AND PATENT APPLICATIONS

Title	Seria	<u>ll No. Filing Da</u>	<u>ite</u> <u>Status</u>
Percutaneous Lymphography Using Particulate Fluorocarbon Emulsions	5,114,703	May 29, 1990	Issued
Percutaneous Lymphography	5,496,536	April 25, 1995	Issued
Methods for Vascular Imaging Using Nanoparticulate Contrast Agents	10/290,582	November 7, 2002	Pending
Compositions and Methods for Delivering Pharmaceutically Active Agents Using Nanoparticulates	10/402,683	March 28, 2003	Pending

BO:99922.3

PATENT REEL: 014192 FRAME: 0225

## EXHIBIT B

## UNITED STATES TRADEMARKS AND TRADEMARK APPLICATIONS

Trademark	Serial No.	Filing Date	<u>Status</u>
Photogen	75/731,196	June 17, 1999	Pending

BO:99922.3

PATENT REEL: 014192 FRAME: 0226

#### AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS AMENDMENT dated as of June 9, 2003, is made by and among Photogen Technologies, Inc., a Nevada Corporation (the "Debtor"), Oxford BioScience Partners IV L.P. and MRNA Fund II L.P. (each a "Secured Party" and collectively the "Secured Parties").

WHEREAS, the parties entered into an Intellectual Property Security Agreement dated as of May 1, 2003 (the "Agreement"); and

WHEREAS the parties desire to amend the Agreement to provide that Security Interest shall secure payment of those certain Revolving Convertible Senior Secured Promissory Notes of even date herewith;

NOW, THEREFORE, in consideration of the mutual promises, covenants and obligations of the Parties set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows. Capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Agreement.

1. "Convertible Notes" shall mean those certain Revolving Convertible Senior Secured Promissory Notes dated as of May 1, 2003 in favor of each of the Secured Parties in the aggregate original principal amount of up to \$1,500,000, and those certain Revolving Convertible Senior Secured Promissory Notes dated as of even date herewith in favor of each of the Secured Parties and Mi3 L.P. in the aggregate original principal amount of up to \$2,660,000. "Secured Parties" shall include Mi3 L.P.

2. The Debtor represents, warrants and covenants that the proceeds of the Convertible Notes shall be used only for working capital and such other purposes as approved by the Company's Board.

3. The "Security Interest Carve-Out" shall mean the property identified on <u>Exhibit A</u> attached hereto.

4. Upon the Secured Parties' request, subject to the prior grant of a security interest in the Security Interest Carve-Out assets to Xmark Fund, L.P. and Xmark Fund, Ltd. and the perfection of their security interest therein, the Debtor shall grant the Secured Parties a junior security interest in the Security Interest Carve-Out assets and shall execute financing statements and other applicable documents and take such other steps as are necessary to cooperate with the Secured Parties to perfect their junior security interest granted therein.

5. Except as expressly set forth herein, all other terms and conditions of the Agreement shall remain in full force and effect.

[Next Page is Signature Page]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date and year first written above.

### **THE DEBTOR:**

### PHOTOGEN TECHNOLOGIES, INC.

By: <u>L'ANCU</u> ven Name: BROOKS BOVEROUX Its: CHZEP FINANCIAL OFFICAN

Address:

Photogen Technologies, Inc.
140 Union Square Drive
New Hope, PA 18938
Attn: Taffy Williams, Ph.D.
President and Chief Executive Officer
Employer identification number: 62-1742885

### THE SECURED PARTIES:

#### **OXFORD BIOSCIENCE PARTNERS IV L.P.**

By:	
Name:	
Its:	

### MRNA FUND II L.P.

By:	 	 	
Name:			
Its:			

#### Mi3 L.P.

By:	
Name:	
Its:	

Address: One Hollis Street, Suite 232 Wellesley, MA 02482 IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date and year first written above.

## THE DEBTOR:

## PHOTOGEN TECHNOLOGIES, INC.

By:	
Nam	ne:
Its:	

Address:

Photogen Technologies, Inc. 140 Union Square Drive New Hope, PA 18938 Attn: Taffy Williams, Ph.D. President and Chief Executive Officer Employer identification number:

## THE SECURED PARTIES:

## OXFORD BIOSCIENCE PARTNERS IV L.P. By DBP Management IV LP

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Name: JON Ath	in Floming
( Is: General	Parthi
<b>&gt;</b>	

MRNAFUNDILL.P. By: OPP Managenteet IV LP	
By Horatton Lunu	
Name: Jonathan Frenting	
Its: General Pricture-	

Mi3 L.P.

By:	
Name:	
Its:	

Address: One Hollis Street, Suite 232 Wellesley, MA 02482 IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date and year first written above.

## THE DEBTOR:

## PHOTOGEN TECHNOLOGIES, INC.

By:	
Name: _	
Its:	

Address:

Photogen Technologies, Inc. 140 Union Square Drive New Hope, PA 18938 Attn: Taffy Williams, Ph.D. President and Chief Executive Officer Employer identification number:

#### THE SECURED PARTIES:

#### **OXFORD BIOSCIENCE PARTNERS IV L.P.**

Ву:	
Name:	
Its:	

## MRNA FUND II L.P.

By:	
Name:	
Its:	
Mi3 L.P. By: Name: UILLIAM D. MCPHEZE Its: MAALAGIN GERIERAL PART	NER

Address: One Hollis Street, Suite 232 Wellesley, MA 02482

**RECORDED: 06/20/2003**